Application No.: 10/821,552 Docket No.: 61641(49163)

This listing of the claims replaces all previous versions, and listings, of the claims.

- (Currently amended) A tissue culture system comprising:
- (a) at least one neural stem/progenitor cell isolated from subependymal zone or hippocampus, expressing at least one LPA receptor;
- (b) a lysophosphatidic acid (LPA) compound selected from the group consisting of LPA 20:5, 18:1 (oleoyl), 16:0 (palmitoyl), and 14:0 (myristoyl) at a concentration range from 1  $\mu$ M to 50  $\mu$ M; and
- (c) a basal culture medium comprising insulin and methyl cellulose, but free of EGF erand FGF2.

## (Cancelled)

 (Currently Amended) The tissue culture system of claim 21, wherein the form of said LPA compound is 18:1 (oleovl) or 16:0 (palmitovl).

## (Cancelled)

- (Previously Presented) The tissue culture system of claim 1, wherein said neural stem/progenitor cell is situated within a neurosphere.
- (Previously Presented) The tissue culture system of claim 1, wherein said neural stem/progenitor cell is derived from a mammal.
- (Original) The tissue culture system of claim 6, wherein said mammal is a mouse.

Application No.: 10/821,552 Docket No.: 61641(49163)

 (Previously Presented) The tissue culture system of claim 6, wherein said mammal is a postmortem human.

- (Previously Presented) The tissue culture system of claim 1, wherein said LPA receptor expressed by said neural stem/progenitor cell is selected from the group consisting of an LPA1, LPA2, and LPA3 receptor.
- (Original) The tissue culture system of claim 1, wherein said stem/progenitor cell expresses at least one of a Sca-1 and an AC133 antigen, and at least one of an LPA1, LPA2 and LPA3 receptor.
- (Original) The tissue culture system of claim 10, wherein said stem/progenitor cell further expresses at least one marker of neuronal differentiation selected from the group consisting of β-III tubulin, and nestin.
  - 12. 14. (Cancelled)
- 15. (Currently Amended) An isolated neural stem/progenitor cell cultivated in a basal culture medium comprising a lysophosphatidic acid (LSA) compound selected from the group consisting of LPA 20:5, 18:1 (oleoyl), 16:0 (palmitoyl), and 14:0 (myristoyl) at a concentration range from 1 μM to 50 μM, wherein said medium comprises insulin and methyl cellulose, but is free of EGF erand FGF2.
  - 16. (Cancelled)

Application No.: 10/821,552 Docket No.: 61641(49163)

- 17. (Cancelled)
- 18. (Previously Presented) The isolated neural stem/progenitor cell of claim 17, wherein the form of said LPA compound is LPA 18:1 (oleoyl) or LPA 16:0 (palmitoyl).